

14. (Twice Amended) A process for producing a rare earth metal-based permanent magnet, comprising the step of forming a metal oxide film containing carbon on the surface of a magnet by a sol-gel coating process using a sol solution into which a metal compound as the metal oxide film forming source is incorporated in an amount of from 0.1 wt % to 20wt % in terms of the metal oxide, thereby forming, between said metal oxide film and the entire surface of said magnet, an interfacial layer with R (rare earth element) atom chemically bonded with a film forming metal atom through oxygen atom.